

hagen, on the recent Danish explorations in Greenland and their significance as to Arctic science in general.

Dr. W. H. Greene presented a paper by Prof. Oscar C. S. Carter, "On the adulterations of oils."

Pending nominations Nos. 1049 to 1054, inclusive, were read.

The rough minutes were read, and the Society adjourned by the presiding member.

April 3. This being a public holiday, Good Friday, by direction of the President no notices were issued and no meeting was held.

Stated Meeting, April 17, 1885.

Present, 20 members.

President, Mr. FRALEY, in the Chair.

Prof. John M. Maisch, a newly elected member, was presented to the chair and took his seat.

Donations for the Library were received from the Geological Survey of India; the Académie Impériale des Sciences of St. Petersburg; the Société Impériale des Naturalistes at Moscow; the Magyar Tudományok Akademia at Budapesth; the Deutsche Geologische Gesellschaft, the Physikalische Gesellschaft, the Verein zur Beförderung des Gartenbaus and Dr. Severin. Robinski, of Berlin; the Kaiserlichen Akademie der Wissenschaften at Vienna; the Verein für Erdkunde, the K. Sachsische Gessellschaft der Wissenschaften, the Zoölogischer Anzeiger and E. Von Meyer of Leipzig; the Neues Lausitisches Magazin; the Kaiserliche Leopoldina Carolina Akademie der Deutschen Naturforscher at Halle; the Naturforschende Gesellschaft at Freiburg i B.; M. Clemens Winkler of Freiburg i S.; the Académie Royale and the Musée Royale d'Histoire Naturelle and Rev. A. Renard, of Bruxelles; the

Société Vaudoise des Sciences Naturelles at Lausanne; the Schweizerische Naturforschende Gesellschaft at Zurich; the Société de Physique et d'Histoire Naturelle and Mr. Henri de Saussure, of Geneva; the Royal Academies at Rome and Turin; the R. Instituto Lombardo; the Geographical, Anthropological, Antiquarian, Zoölogical Societies and the Institution Ethnographique, of Paris; the Musée Guimet; the Société de Émulation d'Abbeville; the R. Academia de la Historia at Madrid; the Secção dos Trabalhos Geologicos, of Portugal; the Geological, Zoölogical, the Royal Geographical, Astronomical and Meteorological Societies, the Society of Arts, of London; the Royal Asiatic Society of Great Britain and Ireland, Nature and Dr. John Evans, of Hemel Hempstead; the Philosophical Society of Glasgow; the Manitoba Historical and Scientific Society and Col. Scoble, of Winnipeg; Mr. Horatio Hale, of Clinton, Canada; the Massachusetts Historical Society; Rev. James Freeman Clarke, Mr. Robert C. Winthrop and Rev. Samuel A. Green, of Boston; Harvard College; the Essex Institute; the American Journal of Science; the American Chemical Society at New York; the Brooklyn Entomological Society; the Long Island and the New Jersey Historical Societies; Mr. Thomas H. Dudley, of Camden; the Academy of Natural Sciences, the Franklin Institute, the College of Pharmacy, the Board of City Trusts, the Journal of Medical Sciences, Mr. Henry Phillips, Jr., and Mr. S. Culin, of Philadelphia; Haverford College; the Johns Hopkins University and the American Oriental Society at Baltimore; the United States Naval Institute, National Museum, Bureau of Education, Geological Survey, the War Department and the Smithsonian Institution; Dr. J. W. Mallett, of Charlottesville; Mr. Jed. Hotchkiss, of Staunton; the Cincinnati Society of Natural History; Rev. Stephen D. Peet, of Chicago; Prof. Charles E. Putnam, of Davenport, Ia.; the University of Michigan; the State Historical Society of Wisconsin; Washburn College; the Colorado Scientific Society and the University of California.

Letters of envoy were received from the Brooklyn Entomo-

logical Society,* Regents of the University of the State of New York, Long Island Historical Society, Department of the Interior (Washington), Bureau of Ethnology (Washington), U. S. Geological Survey, Meteorological Office (London), Central Observatorium (St. Petersburg), R. I. Society for the Encouragement of Domestic Industry, Harvard College Observatory, Cincinnati Society* of Natural History, State Historical Society of Wisconsin, Section de travaux Géologiques de Portugal (Lisbon), Dr. J. W. Mallett, Philosophical Society of Leipzig, Magyar Tudományok Akademia, Schweizerische Gesellschaft (Bern), Physical Society of Berlin, K. Leopold-Carolin-Academy of Halle, A.-S.†, Musée Guimet.

Letters of acknowledgment were received from the University of California, Library of the U. S. Surgeon-General, Washington (116), Franklin Institute (116-117), F. Gutekunst (114, 115, 116, 117), University of Michigan, Chief Signal Officer, U. S. A. (Library Catalogue), K. Bibliothek, Berlin (114, 115), K. Leopold-Carolin-Akademie, Halle A.-S. (Trans. XVI, i; Procs. 113, 114, 115), Wisconsin Historical Society (Procs.).

Letters acknowledging receipt of diplomas were received from Dr. Charles Rau (Washington), Mr. C. C. Jones, Jr., (Augusta, Ga.), Dr. F. B. Hough (Louisville, N. Y.), Alexander G. Bell (Washington), Rev. C. W. King (Cambridge, England), Sir John Bennett Lawes (Rothamstead, England), John O. Westwood (Cambridge, England), E. Malezieux (Paris), John Evans (Hemel Hempstead, England), Prof. Hermann Kopp (Heidelberg).

Letters announcing change of addresses were read from: The Verein für Geographie und Statistik, F. a.-M., Dr. Otto Boethlingk (Lange Strasse 13, Leipzig), Dr. Franz Ritter von Hauer (K. K. Natur-historische Hof Museum, 1, Burg ring Wien), Dr. J. W. Mallett (University of Virginia).

The deaths of the following members were announced: Col.

* On motion, these Societies were ordered to be placed on list of exchanges to receive Proceedings.

† This Society requests pp. 483-498 of No. 109, which were ordered to be sent.

James Worrall (April 1, 1885, æt. 81,) at Harrisburg, Pa.; William Elder, M. D. (April 6, 1885, æt. 79), at Washington, D.C.; Prof. C. T. Siebold (April 8, 1885, æt. 81), at Munich, Bavaria.

On motion, the President was authorized at his discretion to appoint proper persons to prepare obituary notices of deceaseds.

The President stated to the Society that, in pursuance of the resolution adopted March 20th, he had appointed the following gentlemen to prepare obituary notices of the members whose decease was then announced: Dr. DaCosta for Prof. Ellerslie Wallace; Mr. Frederick Graff for Titian R. Peale, and Mr. William Sellers for George Whitney.

Mr. W. Curtis Taylor exhibited some composite photographs on the Galton method, and explained the theory and process of their manufacture.

Prof. F. A. Genth presented a paper entitled "Contributions from the Laboratory of the University of Pennsylvania, No. XXIII. On the *Vanadates* and *Iodyrite*, from Lake Valley, Sierra County, New Mexico, by F. A. Genth and Gerhard vom Rath."

Prof. Cope communicated a paper on some points in Mexican Geology and Zoölogy, and also a paper on some new Eocene Vertebrata.

Prof. P. E. Chase presented (by mail) a proof-sheet of a paper entitled "Further Experiments in Weather Forecast" (to appear in the Journal of the Franklin Institute for May, 1885). Also a paper on the Chase-Maxwell Ratio.

The election of members was postponed to October 16th.

The President reported that he had received and paid over to the Treasurer, \$132.44, the interest on the Michaux legacy due April 1st, 1885.

The Committee on Finance reported that there were sufficient funds in hand for the preparation of the Zeisberger Lenape Dictionary for the press, if the Society should order it to be published.

On motion of Mr. J. Sergeant Price, it was resolved that the consideration of the subject should be postponed until some

estimate of the whole cost of its publication should be furnished to the Committee.

Mr. J. Sergeant Price from the Committee on the Michaux legacy, reported that the Michaux lectures would be delivered as usual at the Horticultural Hall, in Fairmount Park, beginning to-morrow, and presented the following synopsis of the prepared course :

Free lectures in Fairmount Park on Botany and Sylviculture, on Saturdays, at 4 o'clock. Prof. J. T. Rothrock will deliver his usual course of lectures on Botany and Sylviculture, in Horticultural Hall, on the following Saturdays, at 4 P. M.

April 18. Our domestic foes, Bacteria.

25. Our domestic foes, Bacteria.

May 2. Evolution in plants.

9. Fate in forests.

16. New facts in botany.

23. Forests in civilization.

30. Plant freaks.

Sept. 12. Famous trees.

19. Unwelcome plants.

26. Statistics of forestry.

Oct. 3. Forest Laws.

10. Peculiar Woods.

17. Our park.

24. Food adulterations.

The rough minutes were read, and the Society was adjourned by the President.

On Composite Photography. By W. Curtis Taylor.

(Read before the American Philosophical Society, April 17, 1885.)

Composite Photography is the combination of the images of a number of allied objects in such a manner as to produce one photographic impression embodying the effects of all. There are several ways of accomplishing this, but the one to be described to-night is perhaps the simplest and surest.

By this process the common characteristics of every group of related